



Modernizing Idaho's Water Infrastructure

An Ongoing Story Series on the Idaho Water Resource Board's Aging Infrastructure Grant Program **ISSUE No. 6**

Hat Butte Mutual Canal Co.

Project description:

Hat Butte Mutual Canal Company replaced the first quarter-mile of a cement canal with 60-inch diameter double-walled irrigation pipe.

The project area begins at the Snake River rim, where water is lifted 660 feet from the river to Hat Butte's first section of canal. The project was completed in winter 2022-23 so the new pipeline would be ready for the 2023 irrigation season.

"The project went very well. Our contractor, Interwest Supply, did a fantastic job," said Paul Rasgorshek, Board president of the canal company. "Our biggest problem was getting our pipe shipped to the site from Texas in a timely manner. We started hauling pipe to the construction site in November, four pieces at a time. We had to wait for the last pieces of pipe to arrive this spring before irrigation season began, but we got 'er done."

"We've never had to do anything like this before, so it was an education for all of us," Rasgorshek said. "Having a little bit of state money for this



Contractors install 60-inch, double-walled pipe to replace one-quarter mile of old, crumbling concrete open canal. (Courtesy Hat Butte Canal Co.)

project sure helped make everything work!"

The first half mile of Hat Butte's concrete canal was old, brittle and porous, making that portion of canal most frequently in need of repair, he said. That section of the canal also had major seepage losses. Maintenance and repair costs were increasing each year, averaging \$60,000-\$70,000 out of a total of \$100,000 in maintenance costs.

Hat Butte Mutual

Canal Co. services farmland in the Dry Lake area about 10 miles south of Nampa. Built in the early 1960s, Hat Butte's 5.4 miles of cement-lined canal serves 4,961 acres of farmland in Canyon County. The canal has eight shareholders, with five farming operations producing an estimated \$9.2 million in crop value as well as an estimated \$12.6 million in milk value.

Project benefits: Hat Butte's governing board recognizes that the entire canal system needs to be replaced because of the effects of crumbling and outdated infrastructure.

- **Type of project:** Install new, 60-inch diameter pipeline to replace old, crumbling leaky open concrete canal.
- **Location:** 10 miles south of Nampa near the Snake River
- **Total project cost:** \$282,025
- **AIG:** \$78,965
- **Other partners:** Hat Butte Mutual Canal Co. water users
- **Start date:** Winter 2022
- **End date:** May 2023



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Hat Butte Mutual Canal Co. (cont.)

Converting from an open concrete ditch to an enclosed pipeline has the following benefits:

- Eliminating seepage losses
- Eliminating evaporation losses
- Improving water quality
- Improving on-farm efficiency
- Reducing operational and maintenance
- Reducing water usage and saving energy

Hat Butte Canal is in the process of installing a meter at the Snake River pump station to coordinate with existing water use meters to gather specific water loss data.

Meanwhile, the annual repair costs, frequency of infrastructure failure, and observable leakage in the proposed project area clearly indicate significant water loss, officials said.

Upon project completion, Hat Butte will save an estimated \$10,000 per year in maintenance costs and unplanned repairs in the project area. More importantly, the increased efficiency and water resource preservation provide excellent return on this investment, officials said.

"This project benefits the economy by improving efficient access to water resources that support Idaho's most marketable commodities," Rasgorshek said.



Above, the new pipeline has been installed, buried, and it's ready for water conveyance for the 2023 irrigation season. Below, the old leaky concrete open canal. (Courtesy Hat Butte Canal)



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